

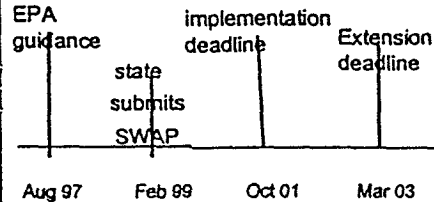
**INTERAGENCY MEETING**  
**California Source Water Assessment Program (SWAP)**  
**April 14, 1997**

1996 SDWA amendments require that states develop source water assessment programs by Feb 6, 1999.

- ◆ Program = policies/procedures for:
  - delineations
  - contaminant source inventories
  - vulnerability/sensitivity assessments
  - public involvement

→ submit to EPA  
by Feb 6, 1999

States are also required to carry out the program by Oct 2001 with a possible extension till March 2003.



SWAP may use existing programs and efforts to avoid duplication; initial ideas include:

- ◆ watershed sanitary surveys
- ◆ monitoring waiver assessment
- ◆ local wellhead protection program activities
- ◆ ongoing regional/state board activities to protect beneficial uses
- ◆ permit process for new sources
- ◆ etc.

April draft SWAP contains 3 elements for groundwater and surface water approach:

- ◆ Delineation
- ◆ Inventory of potential contaminant sources
- ◆ Assessment of vulnerability of the water supply to contamination

For groundwater, delineation would define 2 zones; various methods could be used.

- ◆ Zone A— 2-yr time of travel; for microbial and short-term chemical protection; strict management
- ◆ Zone B— 10-yr time of travel; for long-term chemical protection; primary recharge
  - SubZone B5— 5-yr time of travel
  - SubZone B10— 10-yr time of travel

SWAP would require the most sophisticated delineation method that is feasible to be used.

- ◆ arbitrary fixed radius
- ◆ calculated fixed radius
- ◆ analytical methods
- ◆ hydrogeologic mapping
- ◆ numerical flow/transport models

Contaminant source inventories would be completed using a form provided by the state.

- ◆ potential source (categories of sources with many specific potential sources listed on form)
  - zone
  - potential to impact water (none to high)
  - quantity, # sites or area
  - comments

SWAP vulnerability assessment would be based on the assessments for monitoring waivers in the drinking water regulations.

◆ susceptibility to contamination determination

- previous monitoring results
- user population characteristics; land uses
- proximity to sources of contamination
- elevated nitrate levels
- degree of protection of the water source
- environmental persistence/transport
- historical system O&M data

SWAP delineation/contaminant identification for surface water has been addressed by watershed sanitary survey reg. requirement.

- ◆ 1993 AWWA-DHS Watershed Sanitary Survey guidance manual helped utilities comply with the regulation requiring a survey every 5 years.

→ comprehensive survey and  
contaminant source  
identification process

SWAP would establish "control" zones closer to water sources for better surveillance.

- ◆ One approach would consist of 3 zones within the watershed:

- Zone A— area between source and upper boundary of the bank, area within 400' from upper bank and area within 200' from upper boundary of a tributary or associated source
- Zone B— within 1/2 mi of upper boundary or edge of watershed, which is less
- Zone C— area within watershed not included